

**ALASKA STATE LEGISLATURE  
HOUSE SPECIAL COMMITTEE ON ENERGY**

April 27, 2023

10:15 a.m.

**MEMBERS PRESENT**

Representative George Rauscher, Chair  
Representative Tom McKay  
Representative Stanley Wright  
Representative Mike Prax  
Representative Calvin Schrage  
Representative Ashley Carrick

**MEMBERS ABSENT**

Representative Josiah Patkotak

**OTHER LEGISLATORS PRESENT**

Senator Löki Tobin  
Representative Zack Fields

**COMMITTEE CALENDAR**

HOUSE BILL NO. 121

"An Act relating to a renewable portfolio standard; relating to electrical energy transmission; relating to distributed energy systems; relating to power cost equalization; relating to the Alaska Energy Authority; and providing for an effective date."

- -- TESTIMONY <INVITATION ONLY> --

**PREVIOUS COMMITTEE ACTION**

BILL: HB 121

SHORT TITLE: UTILITIES: RENEWABLE PORTFOLIO STANDARD

SPONSOR(S): REPRESENTATIVE(S) SUMNER

03/17/23	(H)	READ THE FIRST TIME - REFERRALS
03/17/23	(H)	ENE, L&C
04/27/23	(H)	ENE AT 10:15 AM BARNES 124

**WITNESS REGISTER**

REPRESENTATIVE JESSE SUMNER  
Alaska State Legislature

Juneau, Alaska

**POSITION STATEMENT:** As prime sponsor, introduced HB 121.

JESSE LOGAN, Staff  
Representative Jesse Sumner  
Alaska State Legislature  
Juneau, Alaska

**POSITION STATEMENT:** Provided information on HB 121, on behalf of Representative Sumner, prime sponsor.

CHRIS ROSE, Director  
Renewable Energy Alaska Project  
Sutton, Alaska

**POSITION STATEMENT:** Gave a PowerPoint presentation, titled "Why the Railbelt Needs a Renewable Portfolio Standard."

MARK GLICK, Chief Energy Officer  
Hawai'i State Energy Office  
State of Hawai'i  
Honolulu, Hawai'i

**POSITION STATEMENT:** Gave a PowerPoint presentation, titled "Hawai'i State Energy Office."

#### **ACTION NARRATIVE**

[10:15:28 AM](#)

**CHAIR GEORGE RAUSCHER** called the House Special Committee on Energy meeting to order at 10:15 a.m. Representatives McKay, Prax, and Rauscher were present at the call to order. Representatives Carrick, Schrage, and Wright arrived as the meeting was in progress.

#### **HB 121-UTILITIES: RENEWABLE PORTFOLIO STANDARD**

[10:17:24 AM](#)

CHAIR RAUSCHER announced that the only order of business would be HB 121, "An Act relating to a renewable portfolio standard; relating to electrical energy transmission; relating to distributed energy systems; relating to power cost equalization; relating to the Alaska Energy Authority; and providing for an effective date."

[10:18:25 AM](#)

REPRESENTATIVE JESSE SUMNER, Alaska State Legislature, as prime sponsor, introduced HB 121. He explained that HB 121 would require the Railbelt utilities to diversify their sources of energy production and increase the percentage of energy generated using renewable sources. He pointed out that currently 15 percent of energy generated on the Railbelt comes from renewable sources, and the proposed legislation would require an increase of this to 80 percent by 2040. Because of the increase in the price of Cook Inlet natural gas, he said, the Railbelt energy costs have increased sharply; furthermore, Cook Inlet natural gas is expected to fail to meet demand by 2027. He stated that HB 121 would help stabilize energy prices by using available renewable sources of generation to offset the declining supply of natural gas.

[10:20:51 AM](#)

JESSE LOGAN, Staff, Representative Jesse Sumner, Alaska State Legislature, spoke to HB 121, on behalf of Representative Sumner, prime sponsor. He stated that the governor has created an energy task force which will create a list of energy related recommendations by Fall 2023. He advised that these recommendations may influence the proposed legislation going forward.

[10:21:34 AM](#)

The committee took an at-ease from 10:20 a.m. to 10:21 a.m.

[10:22:20 AM](#)

CHRIS ROSE, Director, Renewable Energy Alaska Project, gave a PowerPoint presentation, titled "Why the Railbelt Needs a Renewable Portfolio Standard (RPS)" [hard copy included in the committee packet.] Moving from slide 2 to slide 5, he gave a brief overview, stating that the Renewable Energy Alaska Project (REAP) was founded in 2004 as a statewide, nonprofit coalition of over 60 energy stakeholders, which include developers, consumer groups, electric utilities, and Alaska Native corporations. He stated that REAP collaborates with state and federal agencies, focusing on policy and financing in addition to technology. He reiterated that energy prices on the Railbelt are increasing because of the expected upcoming natural gas shortage. He expressed the opinion that renewable energy generation will be a cheaper and more stable way to make up for the shortfall. He displayed two graphs showing the increase in

residential electric rates and the price of Cook Inlet natural gas versus natural gas prices in other parts of the U.S.

[10:25:05 AM](#)

MR. ROSE, moving from slide 6 to slide 9, displayed graphs showing the volatility of liquified natural gas (LNG) spot prices, LNG spot prices in Japan versus average Cook Inlet prices, and scenarios involving LNG imports up to 2028. He said that 15 new natural gas wells are needed annually to keep up with demand. He advised that imported LNG will be expensive, in part, because of the natural gas market in Asia, while Cook Inlet natural gas contracts will continue to become shorter and more expensive. He expressed the opinion that even in the best-case scenario for imported natural gas, it will be significantly more expensive than current natural gas prices.

[10:28:08 AM](#)

MR. ROSE, displaying slide 10 and slide 11, gave a brief overview of avoided cost. He explained that avoided cost is the cost of generation which is avoided when a utility purchases electricity from a third party. He showed a graph with different avoided cost scenarios for Chugach Electric Association, Matanuska Electric Association, and Homer Electric Association. He added that these scenarios are based on the potential prices of LNG. He said that even small-scale solar projects are matching the avoided cost of natural gas and creating a standard which has been addressed but never materialized.

[10:30:55 AM](#)

REPRESENTATIVE CARRICK questioned the avoided cost in future years.

MR. ROSE answered that the graph shows different scenarios of LNG import prices. He said that \$12 would be an optimistic price, if a long-term deal were signed, and he explained that the higher the cost of imported LNG, the higher the avoided cost would be in regard to RPS. He added that bigger projects would avoid even more cost.

[10:33:35 AM](#)

CHAIR RAUSCHER asked how the projections for future costs were created.

MR. ROSE answered that numbers came from the current market, from Chugach Electric Association possible projects, and the Department of Natural Resources.

[10:34:36 AM](#)

MR. ROSE, on slide 12 through slide 14, stated that rising energy costs on the Railbelt negatively affect rural communities, as it decreases the amount rural costs can be equalized by the power cost equalization program. He displayed a graph showing the amount which would be lost annually per rural households in different LNG price scenarios. He argued that imported LNG should not be the answer and showed a map displaying the different states with some type of renewable or clean energy standard.

[10:37:17 AM](#)

REPRESENTATIVE CARRICK asked for an explanation of the difference between a portfolio goal and a portfolio standard.

MR. ROSE explained that states with a portfolio standard can issue fines for noncompliance. In response to a follow-up question, he said that Alaska does not have codified renewable energy goals.

[10:39:12 AM](#)

CHAIR RAUSCHER asked whether any state without codified goals or standards is in a similar situation to Alaska.

MR. ROSE answered that Alaska is in a unique place, although Hawai'i has the similar situation of being disconnected from the rest of the U.S. He added that Texas is not connected to the national grid.

[10:40:17 AM](#)

MR. ROSE showed slide 15 and slide 16, pointing out graphs depicting the decreasing costs of renewable energy. He said that the decrease in costs is directly related to states putting renewable energy standards in place. He continued that the manufacturing of solar panels is increasing, and this further reduces the costs of generating energy using solar. He stated that solar and wind energy generation are becoming more competitive with natural gas in terms of price. He added that

natural gas is cheaper in the Lower 48, and renewable energy is becoming less expensive to generate, even without subsidies.

[10:43:04 AM](#)

CHAIR RAUSCHER asked whether the reduced prices of renewable energy accounts for the need for battery storage.

MR. ROSE answered that renewable energy prices would still be competitive when accounting for the cost of battery storage. He added that battery storage costs are decreasing.

[10:45:22 AM](#)

MR. ROSE, moving from slide 17 to slide 19, showed graphs depicting the following: percentage by state of generation by solar in 2022; states with RPS which include solar provisions; and the net capacity added in gigawatts by energy source type. He remarked that Massachusetts, a state which is not typically sunny, generates 20 percent of its energy using solar. He expressed the opinion that Alaska has a great opportunity to capitalize on the amount of sun in the summer, and HB 121 would allow homeowners to sell excess energy generated by solar panels at the current market rate. He said that 83 percent of new energy generation in the U.S. last year came from solar and wind generation, and more fossil fuel power plants are being retired than built.

[10:48:35 AM](#)

MR. ROSE, moving from slide 20 to slide 23, stated that in Alaska a similar bill was proposed by the governor in 2022, which passed two committees before the legislature ended. He stated that a study has found RPS of 80 percent achievable and would result in a significant reduction in energy and fuel costs. The estimated cost to achieve 80 percent renewable energy is approximately 3.2 billion, and there would be approximately \$6.7 billion savings before the 10-year extension of federal tax credits for renewable energy.

[10:51:45 AM](#)

MR. ROSE, continuing to slide 24 through slide 26, stated that the 2022 study did not include federal production tax credits or any other type of federal support. The study also did not account for higher LNG prices, the decrease in costs for wind and solar, and the avoidance of carbon taxes. He displayed a

graph depicting planned capacity additions in the U.S. in 2023. He said that wind and solar will make up approximately 35 gigawatts (GW), or 65 percent, of added generation capacity in 2023. An additional 9.4 megawatts (MWs), or 17 percent, is expected to be added in the form of battery storage to save excess power generated during peak times. He stated that the Railbelt has an annual load of 535 MWs, and an additional 348 MWs in renewable generation would meet the goal of 80 percent renewable energy generation. He added that there are companies considering wind and solar projects of over 100 MWs, making the goal achievable if Alaska incentivizes investment.

[10:56:10 AM](#)

CHAIR RAUSCHER asked whether 10 cents per kilowatt-hour would be achieved by 2040.

MR. ROSE answered that achieving such prices would require a significant reduction in overhead costs for the utilities. In response to a follow-up question, he said that reaching the milestones laid out in HB 121 would require an increase in the amount of renewable energy generation. He advised that renewable energy generation is expected to decrease in cost, whereas fossil fuel generation is expected to increase in cost.

[10:59:28 AM](#)

MR. ROSE, displaying slide 27 and slide 28, stated that in 2020, a bill was passed requiring the Railbelt utilities develop a standards and regional planning council for cooperation on energy generation and transmission, and this resulted in the Railbelt Reliability Council (RRC), which is made up of 13 utilities and other stakeholders. He continued that the proposed legislation would require RRC to implement and enforce RPS. He said that the utilities are asking for an investment of \$2.5 billion to create and maintain transmission lines for increased reliability. He stated that an expansion of electricity transmission is necessary to support the investments being made in renewable energy transmission.

[11:02:55 AM](#)

CHAIR RAUSCHER asked whether the Railbelt utilities would have the ability to build the necessary renewable infrastructure on their own.

MR. ROSE answered no, explaining that creating RPS would require drawing from different sources, as this is the only possible way to achieve the goal. In response to a follow-up question, he said that RRC would need a standard to implement renewable energy in Alaska.

[11:05:09 AM](#)

MR. ROSE, moving to slide 29 and then to slide 30, reiterated that creating RPS would diversify energy generation, stabilize and reduce energy costs, increase energy independence, and create additional jobs. He emphasized that time is running out to pass RPS before new contracts are signed, possibly resulting in the import of natural gas; thus, higher energy prices.

[11:07:37 AM](#)

CHAIR RAUSCHER asked whether the utilities would be forced to implement their own RPS if no legislation was passed.

MR. ROSE answered no, although he expressed the hope that they would. He said that implementing RPS would not mean the elimination of LNG contracts; however, it would reduce the amount of LNG needed over time. He added that adding RPS would attract more outside investment into renewable energy in Alaska.

[11:11:04 AM](#)

The committee took an at-ease from 11:11 a.m. to 11:16 a.m.

[11:16:35 AM](#)

MARK GLICK, Chief Energy Officer, Hawai'i State Energy Office, State of Hawai'i, gave a PowerPoint presentation titled, "Hawai'i State Energy Office" [hard copy included in the committee packet. He began on slide 2 and slide 3 and stated that the mission of the Hawai'i State Energy Office is to "promote energy efficiency, renewable energy, and clean transportation to help achieve a resilient, clean energy economy." He gave a list of requirements from Hawai'i's RPS and said each utility in the state will be required to achieve 100 percent renewable energy generation by the end of 2045.

[11:20:22 AM](#)

MR. GLICK, moving to slide 4 and slide 5, stated that Hawai'i also has a decarbonization program. The state has established a

target to sequester more carbon and greenhouse gases than emitted by the year 2045, and limit greenhouse gas emissions to 50 percent below the 2005 level by 2030. He said that the main drivers of energy transition in Hawai'i is the increasing prices of fossil fuels, a sense of urgency in regard to climate change, and bipartisan collaboration.

[11:24:06 AM](#)

MR. GLICK, continuing to slide 6 and slide 7, stated that in 2021, 64 percent of Hawai'i's oil imports came from Libya, 28 percent from Russia, and 8 percent from Argentina. He stated that, in response to the Russian invasion of Ukraine, Hawai'i's only refinery shifted from Russian imports to imports from Argentina and Libya. He displayed a graph comparing crude oil, gasoline, and electricity prices in Hawai'i since 2006. He added that while energy prices have been volatile everywhere, they are more volatile and economically challenging in Hawai'i because of its remote location.

[11:27:24 AM](#)

MR. GLICK, moving to slide 8 and slide 9, displayed graphics depicting the effects of the 2008 through 2009 recession on Hawai'i and the supply chain vulnerabilities faced by the state. He said, during the recession, tax revenue in Hawai'i dropped significantly when compared with the rest of the U.S. He stated that Hawai'i is facing a sharp decline in tourism, posing economic challenges for the state's biggest industry. He added that Hawai'i's oil refinery closed, and the state is facing the challenge of shipping in resources. He added that Hawai'i's energy system is at much greater risk when faced with circumstances such as bad weather.

[11:32:01 AM](#)

MR. GLICK moved to slide 12 through slide 15, stating that Hawai'i is the first state to set RPS at 100 percent. He displayed graphs showing future renewable energy projects and progress towards meeting its RPS goals. He pointed out that the result is a decrease in energy costs at a time when fossil fuel costs are continuing to increase. He stated that Kaua'i Island Electric Cooperative is currently at 70 percent renewable energy generation and is expected to reach 90 percent by 2025.

[11:35:32 AM](#)

REPRESENTATIVE SCHRAGE asked how closing fossil fuel energy generation assets before their expected lifespan was justified.

MR. GLICK answered that, in the early years of Hawai'i's energy transition, there were some increases in costs because assets were being closed before the expected life-expectancy. He added that others had been paid off and were used beyond their expected useful life, and the reduction in future energy costs has been worth the investment.

[11:38:01 AM](#)

CHAIR RAUSCHER announced that HB 121 was held over.

[11:38:18 AM](#)

#### **ADJOURNMENT**

There being no further business before the committee, the House Special Committee on Energy meeting was adjourned at 11:38 a.m.